

**WAREHAM
ROADWAY RECONSTRUCTION AND RELATED
WORK (Including Signals),**

Along a Section of Route 6 & 28 (Cranberry Highway)

FAP #STP/TAP-0035(220)

Project File No. 117106

Contract No. 105995

**Presentation to
MassDOT Board of Directors
March 18, 2019**

Project Need

Safety of the Intersections & Corridor

- 450 crashes in a 3 year-period
- On average over 150 crashes per year

Deficient Pedestrian and Bicycle Accommodation

- 10 Pedestrian crashes in 2011 to 2016, 4 resulting in fatalities

Drainage

- Flooding causing road closures

2011-2015 Crash Locations

- Not reported (1)
- Unknown (4)
- Non-fatal injury (115)
- Property damage only (340)
- Fatal injury (2)

Map Labels:

- 1 Non-fatal injury
6 Property damage only (none injured)
- 2 Property damage only (none injured)
- 6 Non-fatal injury
24 Property damage only (none injured)
1 Unknown
- 9 Non-fatal injury
24 Property damage only (none injured)
- 1 Fatal injury
9 Non-fatal injury
8 Property damage only (none injured)
- 3 Non-fatal injury
4 Property damage only (none injured)
- 3 Non-fatal injury
2 Property damage only (none injured)
- 1 Non-fatal injury
7 Property damage only (none injured)
1 Unknown
- 18 Non-fatal injury
49 Property damage only (none injured)
- 2 Non-fatal injury
3 Property damage only (none injured)
- 9 Non-fatal injury
52 Property damage only (none injured)
- 7 Non-fatal injury
1 Not reported
42 Property damage only (none injured)
1 Unknown
- 1 Fatal injury
5 Non-fatal injury
14 Property damage only (none injured)
- 8 Non-fatal injury
14 Property damage only (none injured)
- 3 Non-fatal injury
5 Property damage only (none injured)
- 8 Non-fatal injury
17 Property damage only (none injured)
1 Unknown
- 3 Non-fatal injury
7 Property damage only (none injured)
- 1 Non-fatal injury
5 Property damage only (none injured)
- 3 Non-fatal injury
3 Property damage only (none injured)

Map Features:

- Streets: Main Street, Broad Street, Riverside Drive, Muddy Cove, Broad Cove, Old West Road, Boring Street, Down Street, Court Street, Main Avenue, Elm Avenue, Broad Street, Riverside Drive, Muddy Cove, Broad Cove.
- Scale: 0 to 600 Feet.
- Legend: Not reported (1), Unknown (4), Non-fatal injury (115), Property damage only (340), Fatal injury (2).



Figure 1

2011 - 2015 Crash Locations
Wareham, Massachusetts

Existing Issues



Flooding causing road closure
(published by Wareham Week 4/4/2017)



No Pedestrian accommodations

Project Goals

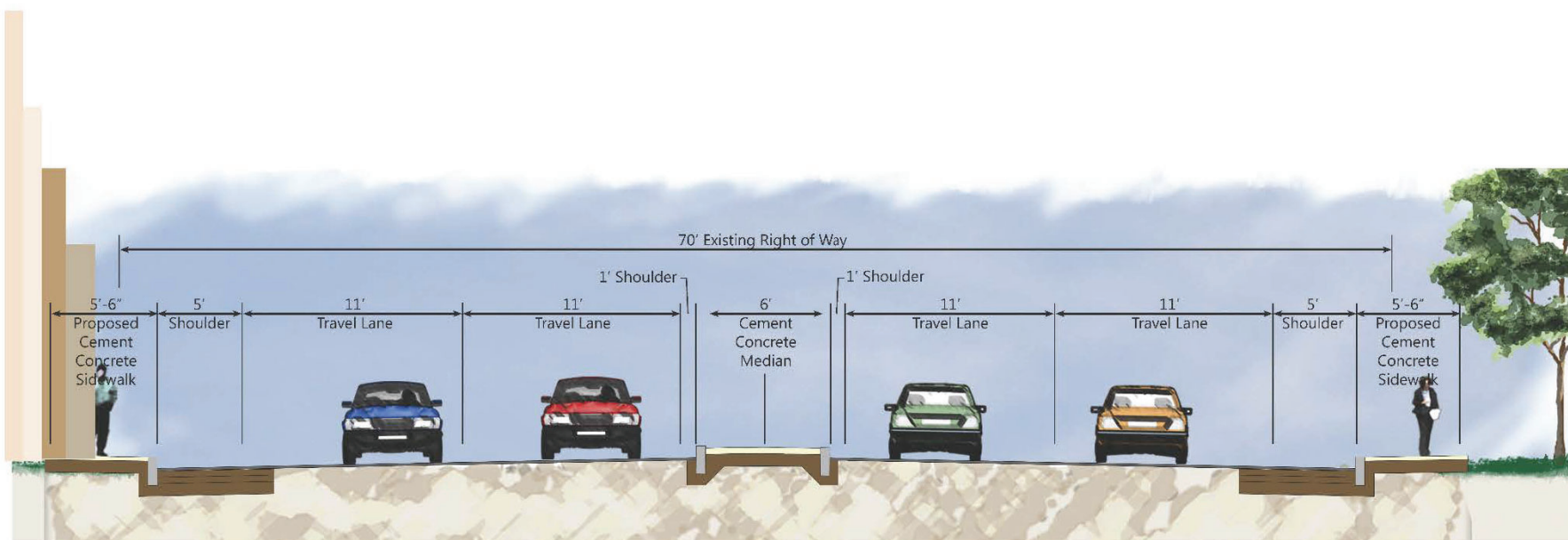
- **SAFETY**
 - **Pedestrian and Bicycle Safety**
 - Improve Pedestrian Crossings, AAB/ADA Compliant sidewalks, Accessible Pedestrian Systems (APS) at all Traffic Signals
 - Construction sidewalks, Improve Bike Accommodations
 - **Intersection and Corridor Safety**
 - Reconstructed Traffic Signals, Dedicated Turn Lanes, Median
- **Drainage**
 - Reduce Flooding, Treat Runoff

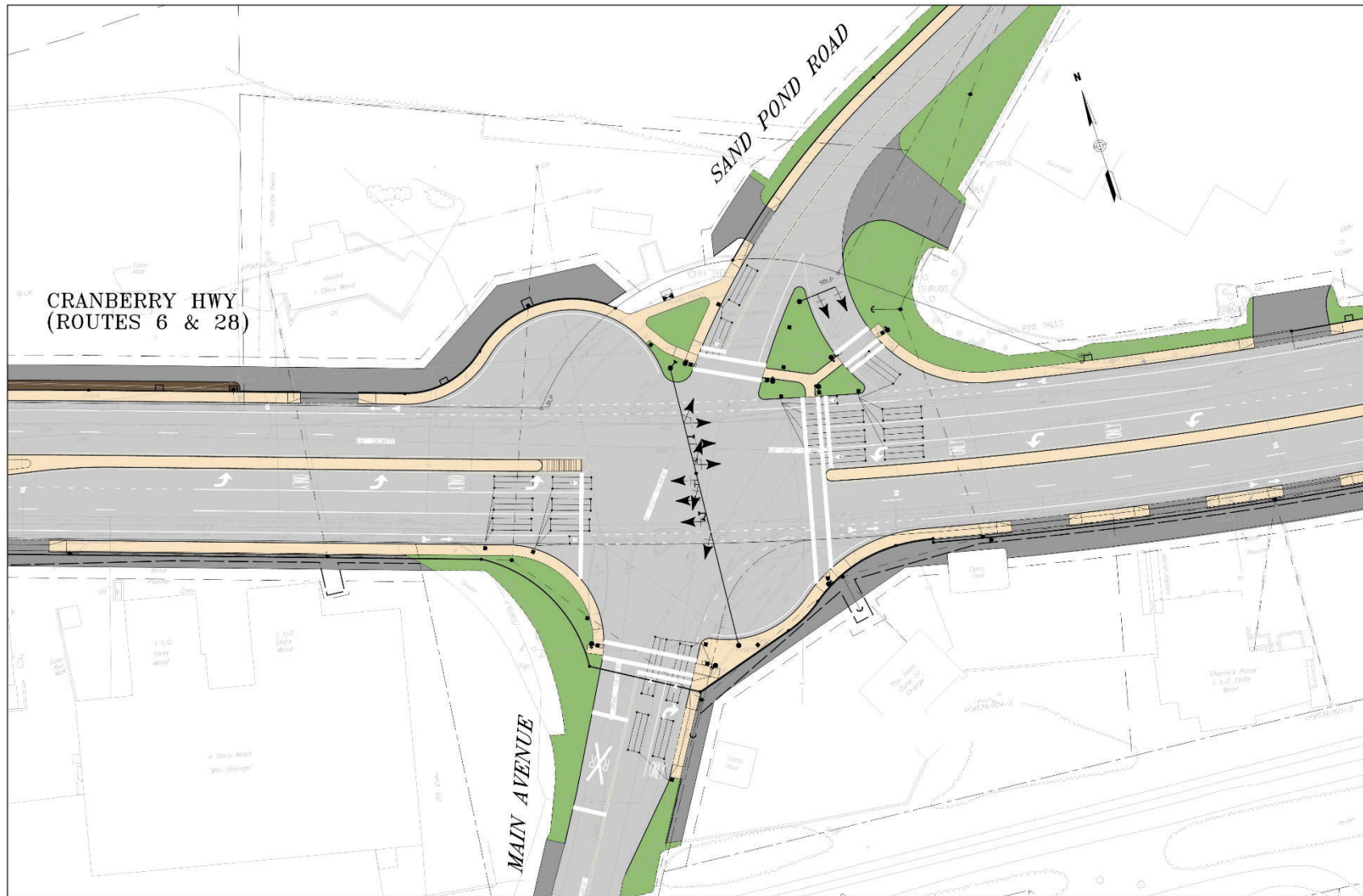
Project Scope of Work

The project consists of roadway and traffic control improvements to approximately 8,820 feet of Routes 6 & 28 (Cranberry Highway).

- Widening to create a four lane highway
- Raised median and shoulders for bicycle accommodation,
- Installation of curbing, construction of concrete sidewalks,
- Construction of concrete driveway aprons
- Reconstruction of traffic signal systems
- Installation of highway lighting
- Installation of a new stormwater drainage system
- Stormwater basins
- Traffic signalization

Proposed Cross Section





History of Public Outreach

- **Project Community Kick-off Meeting (August 2009)**
- **Wareham Planning, Police, DPW Meeting (October 2009)**
- **Wareham Department Head Meetings (August 2010, March 2011)**
- **Wareham Works Summit (March 2011)**
- **Wareham Selectmen's Meetings (June 2011, May 2012)**
- **MassDOT Design Public Hearing (July 2012)**
- **Road Safety Audit (December 2012)**
- **Cranberry Highway Information Fair (June 2013)**
- **Wareham Selectmen Meeting (July 2013)**
- **Meeting With Business Owners (January 2018)**
- **Legislative Meeting (January 2018)**
- **Legislative Meeting (February 2018)**
- **Wareham Business Meeting (February 2018)**
- **Wareham Public Information Meeting (February 2018)**
- **Onset Fire District Meeting (October 2018)**

Design Changes from Public Outreach

- Project Length reduced from 2.7 to 1.65 miles
- Additional U-Turn Location added between signalized intersection
- Dick's Pond – raised roadway and redirected runoff
- Shorten median at east end of the project
- Added an additional pedestrian activated signal crossing
- Added night work to the contract to reduce duration and disturbance to the business owners and abutters
- Altered curb cut location to better suit abutters' needs
- Revised utility pole guy wire locations to have less ROW impact
- Connected property owner with MassDOT Sign Relocation Department to revise reset sign locations
- Reviewed parking and circulation concerns with abutters
- Changed material of sidewalks and medians to cement concrete to improve appearance and maintenance
- Coordinated with Town of Wareham and proposed affordable housing unit development within project limits

Project Schedule

Construction Starts
Spring 2019

Substantial Completion
Spring 2023

Full Beneficial Use
Fall 2022

**Contract Field
Completion**
Summer 2023



Total Project Cost

Bid Amount:	\$ 17,372,109.00
Traffic Police	\$ 775,800.00
Trainees	\$ 5,600.00
Railroad Flaggers	\$ 15,000.00
Contingencies (10%)	\$ 1,610,012.40
<u>5% Construction Engineering</u>	<u>\$ 908,435.45</u>
Total	\$ 20,686,956.85

Bid Estimate Comparison

Contractor	Bid Amount	Difference from Office Estimate
Office Estimate	\$16,160,914.65	
PA Landers	\$17,372,109.00	7.49%
P. Gioisio & Sons, Inc.	\$18, 615, 975.00	15.19%
JH Lynch and Sons Inc.	\$19,980,209.50	23.63%
ET & L Corp	\$20,059,389.00	24.12%
Northwestern Construction Services LLC	\$20,475,678.00	26.7%
Average Bid	\$19,300,673.90	16.27%

- **6 Bids Received, 5 accepted, 1 non-responsive**
- **Recommend award to the Low Bidder**